

## **CoQ10 and vitamin E improves symptoms of movement disorder**

The April 2005 issue of the American Medical Association journal *Archives of Neurology* (<http://archneur.ama-assn.org/>) published the findings of researchers in England that a combination of the antioxidant nutrients coenzyme Q10 and vitamin E appears to slow the progression of Friedreich ataxia, an inherited disease characterized by progressive difficulty in movement, loss of sensation, skeletal abnormalities and enlargement of the heart. A reduced energy supply may be an early event in the disease. Increased oxidative damage has also been observed, which may further increase with the progression of the disorder.

In the current study, ten patients with genetically confirmed Friedreich ataxia were administered 525 international units vitamin E and 200 milligrams coenzyme Q10 twice per day for over 47 months. Blood tests were conducted periodically during the trial to monitor the participants' serum levels of the nutrients. Neurologic assessments, electrocardiograms, and magnetic resonance spectroscopy of cardiac and skeletal muscle were also periodically conducted during the study and at its completion. Data from 77 patients with the Friedreich ataxia that allowed the researchers to predict the clinical course of the disease was used for comparison.

At the study's conclusion, it was determined that treatment with coenzyme Q10 and vitamin E improved mitochondrial energy synthesis. This was associated with a slowing of some features of the disease, such as kinetic scores, although posture and gait continued to deteriorate. Heart function also significantly improved. The authors recommend a larger randomized trial to confirm whether antioxidant treatment should be initiated to prevent the progression of Friedreich ataxia in its early stage.